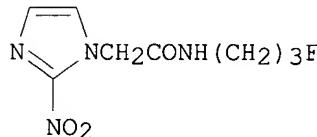


10-24-02

Abstract given  
w/ written restriction  
requirements

L3 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 1999:719194 CAPLUS  
DOCUMENT NUMBER: 132:49925  
TITLE: Synthesis of new hypoxia markers EF1 and [18F]-EF1  
AUTHOR(S): Kachur, Alexander V.; Dolbier, William R., Jr.;  
Evans,  
Sydney M.; Shiue, Chyng-Yann; Shiue, Grace G.; Skov,  
Kirsten A.; Baird, Ian R.; James, Brian R.; Li,  
An-Rong; Roche, Alex; Koch, Cameron J.  
CORPORATE SOURCE: Department of Radiation Oncology, University of  
Pennsylvania, Philadelphia, PA, 19104, USA  
SOURCE: Applied Radiation and Isotopes (1999), 51(6), 643-650  
CODEN: ARISEF; ISSN: 0969-8043  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
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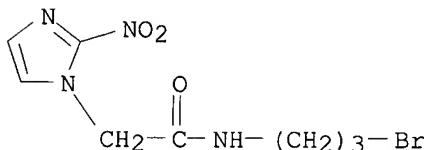
AB We report on the prepn. of a hypoxia marker  
2-(2-nitroimidazol-1[H]-yl)-N-(3-fluoropropyl)acetamide (EF1, I) and its 18F analog. Two methods for the prepn. of 3-fluoropropylamine, the EF1 side chain, are described. [18F]-EF1 was prepd. with a radiochem. yield of 2% by nucleophilic substitution of bromine in 2-(2-nitroimidazol-1[H]-yl)-N-(3-bromopropyl)acetamide (EBr1) by carrier-added 18F in DMSO at 120.degree.. Our results demonstrate the prepn. of clin. relevant amts. of [18F]-EF1 for use as a non-invasive hypoxia marker with detection using positron emission tomog.

IT 252736-27-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and reaction with fluoride)

RN 252736-27-9 CAPLUS

CN 1H-Imidazole-1-acetamide, N-(3-bromopropyl)-2-nitro- (9CI) (CA INDEX NAME)

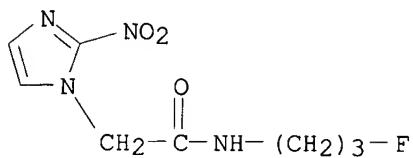


IT 252736-28-0P 252736-29-1P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

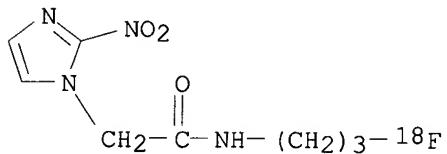
RN 252736-28-0 CAPLUS

CN 1H-Imidazole-1-acetamide, N-(3-fluoropropyl)-2-nitro- (9CI) (CA INDEX  
NAME)



RN 252736-29-1 CAPLUS

CN 1H-Imidazole-1-acetamide, N-[3-(fluoro-18F)propyl]-2-nitro- (9CI) (CA  
INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR  
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FORMAT